had obtained from the original locality a good supply of specimens in perfect order, and although these agreed with the original description perfectly, they should only be labelled as "typical," and he was of the opinion that the describer even would not be justified in labelling them "type." Professor Osborn agreed with the last speaker.

### (To be Continued.)

## CORRESPONDENCE.

### NOTES ON IPS.

In vol. xvii., p. 46, of the CAN. ENT., Dr. John Hamilton gives some notes on Ips fasciatus and allied forms. He says:--" The form fasciatus is the most common here (Allegheny, Penn.), and is that into which all the others are resolved; in it the elytra are black with an irregular broad basal, and a sub-apical fascia, yellow; individuals are met with totally black without any spot; others have only a small basal and sub-apical spot yellow (more often reddish); others add to these a humeral lunule; others have various other spots, and by the gradual dilation and coalescing of these through a series of specimens, the full form fasciatus is reached." He further says that he has never met with these black and spotted forms at any other time than in early spring, usually during April. As the season advances these entirely disappear and the fasciate form alone remains, continuing till autumn. Judging from my observations of these forms at Montreal, I cannot quite agree with Dr. Hamilton's opinion. I find that in the fasciate form the colour is bright clear yellow, while in all the spotted specimens that I have seen the colour is very pale yellow, almost white; the difference in this respect being very marked. With respect to seasons, I find that the spotted form, or what I take to be 4-signatus, occurs during summer as well as in spring, as the following notes will show:-April 24th, 1886, found Ips fasciatus and the spotted forms common at a bleeding stump on Montreal Mountain, 4-signatus being most abundant. June 12th, 1886, found several specimens of Ips 4-signatus in a small hole in the bark of an oak tree, where the sap was oozing out. August 5th, 1886, found a specimen of Ips 4-signatus on a tombstone in Mount Royal Cemetery. August 15th, 1886, found a specimen of Ips 4-signatus on a tomato on the breakfast table. July 26th,

1888, found a specimen of *Ips 4-signatus* in a jug of milk. The last "find" was a rather curious one, but the specimen was quite fresh, and had evidently been "supplied" with the morning's milk. No specimens of *fasciatus* were observed during the summer months, so that my experience appears to have been just the reverse of Dr. Hamilton's.

F. B. CAULFIELD, Montreal.

#### INSECTS FEIGNING DEATH.

Dear Sir : I have read with much interest Mr. A. R. Grote's communications upon the subject of "Insects Feigning Death," glad always of the opportunity of learning from the older members of the entomological fraternity. But in this case I am not sure that I comprehend the gentleman's meaning. In the June number of the CAN. ENT. he expresses a doubt in regard to insects possessing any knowledge of death, and hence <sup>°</sup>considers that they are not mentally capable of feigning death. In the August number he again takes up the subject and says, "It is probable to me that their attitudes of repose are assumed from the experience they have gradually acquired, that in a state of quiet they will best avoid the immediate dangers which beset them, etc." Immediate dangers of what ? Physical pain, a knowledge of which they have gained by frequent captures and escapes? It strikes me that it is not only not this, but death itself which they seek to avoid. With no knowledge of death, as such, why should they seek to avoid it? Is it not true that all animal life is doomed to die sooner or later? And is not a knowledge of the fact that it is something to be feared and avoided as long as possible, necessary to the perpetuation of species ? Surely even insects would not seek to avoid that of which they have no knowledge. Does not the very presence of the sense of fear presuppose a knowledge of death, in the sense of annihilation? If the larva of a Geometer has learned, no matter whether by experience or instinct, that by assuming a certain rigid position resembling a portion of the twig upon which it is itself located, it is thereby enabled to escape destruction in common with the twig; might not another species, by the same course of reasoning, learn that, to assume the same inanimate position as a dead companion who is not carried away, it also might escape? Beetles belonging to the genera Chlamys and Exema, of the family Chrysomelidæ, will often drop from a seemingly safe position on the stem of a plant to the exposed upper surface of a leat of the same, remaining there perfectly quiet without making any further attempt to escape, their only protection being the form and color of their bodies, which very strongly resemble the excrement of caterpillars. After all have we not reason to believe that life, to an insect, embodies all that is precious; the alpha and omega of all that is worthy of being cherished and protected? Knowing as we do the great variety of methods by which insects seek to protect this life, is it so highly improbable that they should hit upon the plan of feigning its absence? The question is an interesting one, though difficult, and, perhaps, impossible to solve; yet it certainly involves nothing that should lead us to forget that we are fellow-workers. F. M. WEESTER, Lafayette, Ind.

# DANAIS ARCHIPPUS.

Dear Sir: In view of the discussion now going on respecting this insect, it may not be amiss to give some observations from this locality. D. archippus (alias plexippus) is an exceedingly common butterfly in Custer Co., Colorado, from the end of April throughout the summer. At the present time it is abundant near my house, at about 8,400 feet alt., especially frequenting the flowers of Oxytropis lamberti, and also seeming much attracted by a patch of Trifolium pratense that has sprung up in a timothy field. But the peculiar thing is, that so far as I know, Asclepias, the food-plant, does not occur nearer than some four or five miles away, and at perhaps nearly a thousand feet lower elevation. The only larva I have seen here was an immature one brought to me July 3rd, which had been found on Asclepias at about 7,300 feet alt., some six miles from here. Yet the specimens of plexippus found up here at 8,400 feet are perfectly fresh and undamaged (much more so than Papilio asterias, which breeds up here), and further, are frequently to be seen paired.

July 22nd. T. D. A. COCKERELL, West Cliff, Colorado-

NOTICE.—The Annual Meeting of the Entomological Society of Ontario will be held in the City Hall, Ottawa, on Friday, October 5th. It is hoped that there will be a full attendance of members.

Mailed October 3rd.